

Is 6X Milking Profitable?

A recent study conducted on a commercial dairy in Israel and published in the scientific magazine *Animal* (Shoshani et al., 2016) examined the effects of milking six times daily during the first 21 days of lactation on milk production. The study included 122 Holsteins milked three (3x) or six (6x) times daily for the first 21 days of lactation, and then 3x for the rest of lactation.

During the first 21 days of lactation, 6x milked cows produced 16.1 lb. per day more energy-corrected-milk (ECM) than the 3x milked cows. Throughout the lactation, first lactation cows produced 1,560 lb. more milk and second lactation cows produced 1,359 lb. more milk compared to cows milked 3x. However, second- and higher lactation cows produced 0.37% less milk.

Additionally, after the next calving, ECM yields were affected in the succeeding lactation. The ECM yield was 1,924 lb. higher in the first lactation cows previously milked 6x. Similar results were seen in second-lactation cows that were previously milked 6x. However, cows older than second lactation, milked 6x in previous lactations, produced 1,183 lb. less milk.

No adverse effects of 6x milking on energy balance, mastitis, metabolic diseases or reproduction were seen. This data shows it is economically beneficial to milk fresh first- and second-lactation cows 6x, however it is counterproductive to follow this practice in older cows.

Adopting this management practice might be beneficial as long as the “time budget” of the cows is respected, and their extra nutritional needs are covered. Increasing time spent milking reduces the time available in the pen for other essential activities such as eating, drinking and

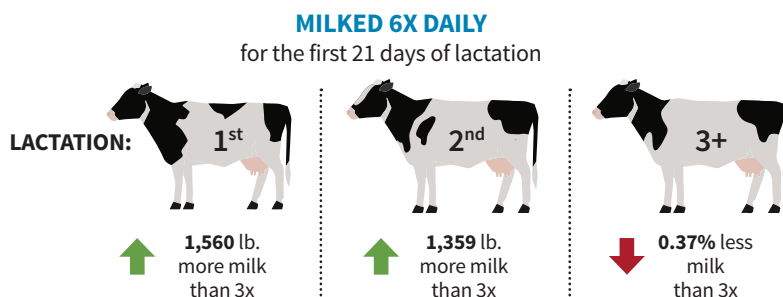
resting. In conventional freestalls, minimizing time away from the pen is a priority. Because total time cows are out of the pen for milking should be less than 3 hours, each milking should be performed in less than 30 minutes. Therefore, the fresh-cow pen needs to be located close to the milking center to minimize distance, and it should be adequately sized and efficient. Every cow should have a headlock and a stall available to avoid competition and maximize resting time.

If these basic cow welfare rules are not followed, 6x milking might be counterproductive. A University of Arizona study showed cows milked 6x during the first 21 days produced 7.5% less ECM during the first 9 weeks postpartum than cows milked 3x (VanBaale et al., 2005). In this work, cows were housed in a dry-lot facility located 87 ± 36 m from the milking center so cows in the 6x milking schedule spent, on average, 3.25 more hours per day outside their pen than cows in the 3x milking schedule. **M**



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Benefits depend on how much time cows spend out of the pen

Each milking should be performed in less than



30 minutes

